

SH  
E/

retrieval means for retrieving phoneme data having identical phoneme environments and fundamental frequencies from the plural items of phoneme data stored in said storage means;

first penalty assigning means for sorting the phoneme data retrieved by said retrieving means based upon a prescribed attribute value and for assigning a penalty that is based upon an attribute value to each item of the phoneme data on the basis of order obtained by sorting; and

selection means for selecting, from the phoneme data retrieved by said retrieval means, and based upon the penalty assigned by said first penalty assigning means, phoneme data to be employed in synthesis of a speech waveform.

26. (Amended) A speech synthesizing method comprising:

SH

a storage step of storing plural items of phoneme data,

wherein each item of phoneme data includes an attribute value for phoneme environment, phoneme boundary and fundamental frequency, power and phoneme duration;

a retrieval step of retrieving phoneme data having identical phoneme environments and fundamental frequencies from the plural items of phoneme data stored at said storage step;

a first penalty assigning step of sorting the phoneme data retrieved at said retrieving step based upon a prescribed attribute value and of assigning a penalty that is based upon an attribute value to each item of the phoneme data on the basis of order obtained by sorting; and

5/21  
a selection step of selecting, from the phoneme data retrieved at said retrieval step, and based upon the penalty assigned at said first penalty assigning step, phoneme data employed in synthesis of a speech waveform.

27. (Amended) A storage medium storing a control program for causing a computer to execute speech synthesis using phoneme data, said control program having:

code of a storage step of storing plural items of phoneme data,

wherein each item of phoneme data includes an attribute value for phoneme environment, phoneme boundary and fundamental frequency, power and phoneme duration;

code of a retrieval step of retrieving phoneme data having identical phoneme environments and fundamental frequencies from the plural items of phoneme data stored at said storage step;

code of a first penalty assigning step of sorting the phoneme data retrieved at said retrieving step based upon a prescribed attribute value and of assigning a penalty that is based upon an attribute value to each item of the phoneme data on the basis of order obtained by sorting; and

code of a selection step of selecting, from the phoneme data retrieved at said retrieval step, and based upon the penalty assigned at said first penalty assigning step, phoneme data employed in synthesis of a speech waveform.

---

Please add new claims 28-32 as follows.

28. (New) A speech synthesizing apparatus comprising:

122 storage means for storing plural items of phoneme data;

retrieval means for retrieving phoneme data, in accordance with given retrieval conditions, from the plural items of phoneme data stored in said storage means;

penalty assigning means for assigning a penalty to each of the plural items of phoneme data so as to raise the possibility that phoneme data whose value of a predetermined attribute is close to an average value of the predetermined attribute, is selected; and

selection means for selecting, from the phoneme data retrieved by said retrieval means, and based upon the penalty assigned by said penalty assigning means, phoneme data to be employed in synthesis of a speech waveform.

29. (New) The apparatus according to claim 28, wherein said penalty assigning means assigns a penalty in such a manner that a small penalty is assigned to a phoneme data whose value of the predetermined attribute is close to the average value, and a large penalty is assigned to a phoneme data whose value of the predetermined attribute is far from the average value.

30. (New) A speech synthesizing method comprising:  
a storage step of storing plural items of phoneme data;  
a retrieval step of retrieving phoneme data, in accordance with given search retrieval conditions, from the plural items of phoneme data stored at said storage step;  
a penalty assigning step of assigning a penalty to each of the plural items of phoneme data so as to raise the possibility that phoneme data whose value of a predetermined attribute is close to an average value of the predetermined attribute, is selected; and  
a selection step of selecting, from the phoneme data retrieved at said retrieval step, and based upon the penalty assigned at said penalty assigning step, phoneme data employed in synthesis of a speech waveform.

31. (New) The method according to claim 30, wherein the penalty assigning step assigns a penalty in such a manner that a small penalty is assigned to a phoneme data whose